

Massachusetts Joins RGGI Partners to Significantly Cut Greenhouse Gas Emissions from Power Plants

The Commonwealth of Massachusetts recently joined its partners in the Regional Greenhouse Gas Initiative (RGGI) to significantly cut greenhouse gas



Massachusetts Joins RGGI Partners to Significantly Cut Greenhouse Gas Emissions from Power Plants



New Solid Waste Master Plan Puts Massachusetts on the Road to 'Zero Waste' by 2020



Governor Patrick Touts MassDEP Permit Streamlining, Regulatory Reform Efforts



Commonwealth Funds Area-Wide Water Quality Management Plan for Cape Cod



\$512 Million in SRF Loans Awarded to 89 Clean Water and Drinking Water Projects in 2013



EIPAS Return on Investment Study is Good News for MassDEP and the EEA Secretariat



RGGI is a collaborative effort to limit carbon dioxide emissions from power plants by requiring that certain power generators purchase "allowances" to correspond to their emissions.

emissions from power plants over the next six years. Massachusetts and the other eight RGGI states agreed to reduce carbon dioxide emissions by 90 million tons, a reduction that is about 30 times the amount of emissions released from the state's largest power plant.

MassDEP Commissioner Kenneth Kimmell and DOER Commissioner Mark Sylvia played a leading role in obtaining this agreement, with strong backing from Governor Deval Patrick and EEA Secretary Rick Sullivan.

The historic agreement calls for the nine states to lower an existing "cap" on power plant emissions from the current level of 165 million tons per year to 91 million tons per year. This will also generate an estimated \$350 million in additional revenue for Massachusetts for the period ending 2020, and these revenues will be invested in helping Massachusetts

MassDEP eNewsletter • Summer 2013









businesses and residences become more energy efficient.

In announcing the agreement and the Commonwealth's support, Governor Deval Patrick said that it would not only reduce emissions, but increase growth of the clean energy economy in Massachusetts. "It is also a strong statement that this region, which comprises nearly 20 percent of the national economy, is serious about being stewards of our environment and addressing climate change," he said.

The RGGI revisions followed a comprehensive two-year program review. The states determined that the current supply of carbon allowances in the nine-state region (165 million) far exceeds the demand (91 million in 2012), so the RGGI Agency Heads decided to reduce the cap to 91 million tons. They also decided that the cap should be reduced by 2.5 percent per year after 2014, so that by 2020, emissions from the RGGI states will be substantially lower than they are today.

"This is one of the largest greenhouse gas reduction measures that we have seen, and the best part is that it is not just Massachusetts doing the reduction – eight other states are joining us," said Energy and Environmental Affairs Secretary Rick Sullivan. "I applaud the Governor's leadership on this issue and am proud that Massachusetts is a driving force behind this second historic agreement."

"The 2008 Global Warming Solutions Act put Massachusetts on a path to make steep reductions to its greenhouse gas emissions. This agreement will help the Commonwealth reach our ambitious goals," said MassDEP Commissioner Kenneth Kimmell. "I am also pleased that a bi-partisan group of energy and environmental commissioners from nine states recognized that this is not only good

environmental policy, but good economic policy for each of the states."

Massachusetts and the eight other RGGI states – Connecticut, Delaware, Maine, Maryland, New Hampshire, New York, Rhode Island and Vermont – form the nation's first mandatory "cap-and-trade" program for carbon dioxide emissions. Each state agreed to seek the necessary changes to its laws or regulations to implement the agreement by early 2014.

In Massachusetts, the new RGGI model rule is currently being drafted and reviewed. It is expected that the regulatory revisions to implement the model rule changes will go out for public comment this summer, and be finalized by the end of the year.

RGGI is a collaborative effort to limit carbon dioxide emissions from power plants by requiring that certain power generators purchase "allowances" to correspond to their emissions. RGGI has worked successfully to lower power plant emissions, providing the member states with allowance proceeds that they have invested in the clean energy economy.

An independent analysis of the first three years of the RGGI program concluded that it added \$400 million in net present economic value to Massachusetts alone, electricity consumers enjoyed a net lifetime gain of nearly \$1.1 billion, as their overall electric bills drop over time, and the RGGI states lowered by more than \$765 million the total dollars sent outside the region in the form of payments for fuel.

For more information on the RGGI program and the emission reductions, visit: http://www.mass.gov/eea/agencies/massdep/news/releases/rggi-pact-cuts-carbon-cap-in-2014-and-more-in-future.html









New Solid Waste Master Plan Puts Massachusetts on the Road to 'Zero Waste' by 2020



The Solid Waste Master Plan requires operators of landfills, incinerators and transfer stations to hire independent third-party inspectors to check and ensure that recyclable materials are taken out of the waste stream.

In early May, MassDEP unveiled the final Solid Waste Master Plan for Massachusetts. concluding an extensive public outreach and public comment period over the preceding months, after years of research and analysis. The plan sets an ambitious and reachable goal of reducing the state's waste stream by 30 percent by 2020, and 80 percent by 2050, by employing a diverse strategy of increased commercial and residential recycling, materials re-use, tightening of the existing waste-ban enforcement across the Commonwealth, and by increasing the diversion of organics and food waste. It fosters and encourages the growth of anaerobic digestion and composting capacity, and extending producer responsibility for a variety of products.

The Plan includes a bold strategy to divert an additional 350,000 tons of food waste and organic materials on an annual basis by 2020 and build 50 megawatts of renewable energy

from anaerobic digestion. The Plan also requires operators of landfills, incinerators and transfer stations to hire independent third-party inspectors to check and ensure that recyclable materials are taken out of the waste stream, and MassDEP is in the process of hiring three inspectors to increase review and enforcement of the waste bans. Finally, the Plan supports the current effort by "RecyclingWorks in Massachusetts" to start or expand the recycling programs at businesses across the Commonwealth.

With "zero-waste" as the ultimate goal, the Plan addresses the prospect of a looming 700,000-ton-per-year shortfall of disposal capacity in Massachusetts, even when all recycling and waste ban initiatives are fully implemented. So, the Plan allows a modification to the current incinerator moratorium to encourage the development of innovative and alternative technologies for converting municipal solid waste to energy or fuel on a limited basis.

"Massachusetts can no longer afford the same old methods of managing waste, and it's unwise to rely on exporting our trash to other states," said MassDEP Commissioner Kenneth Kimmell. "Traditional disposal of valuable materials is a waste of resources and a lost economic opportunity. By encouraging the development of innovative technologies, we can address that portion of the waste stream that recycling cannot now handle."

The moratorium modification will allow the development of alternative technologies like gasification or pyrolysis. Total additional capacity for gasification or pyrolysis of solid waste will be limited statewide to 350,000 tons per year, which is half of the projected in-state capacity shortfall. If not addressed, that capacity shortfall would require these wastes to be exported to out-of-state facilities.

MassDEP eNewsletter • Summer 2013









Any proposed gasification or pyrolysis projects will have to meet stringent recycling, emissions and energy efficiency standards, and new facilities will be subject to the same site assignment rules as other solid waste facilities.

To see the final Solid Waste Master Plan for 2010-2020 and the response to comments received on the draft document, visit: http://www.mass.gov/eea/agencies/massdep/recycle/reports/solid-waste-master-plan.html

To get more information on the release of the Solid Waste Master Plan, visit: http:// www.mass.gov/eea/agencies/massdep/news/ releases/solid-waste-master-plan-towardszero-waste.html

Governor Patrick Touts MassDEP Permit Streamlining, Regulatory Reform Efforts



MassDEP Commissioner Kenneth Kimmell talks about the agency's Regulatory Reform efforts and permit-streamlining successes as Governor Deval Patrick looks on. They are standing in front of the old Lovejoy Wharf building in Boston, which is being renovated into the new corporate headquarters for Converse. MassDEP approved the permits for the Lovejoy Wharf project at "the speed of business."

In 2007, Governor Deval Patrick announced his "Regulation at the Speed of Business" Initiative to speed the regulatory decisions that are critical for the development of projects in Massachusetts. As part of that initiative, he directed MassDEP to simplify its permitting process to match "the speed of business." Governor Patrick charged MassDEP with issuing 90 percent of permit applications within 180 days or less, as well as reforming key permit categories, selected because of their significance to economic development. The targeted categories included wetlands appeals, air quality permits, Chapter 91 licenses and groundwater discharge permits.

In response, MassDEP initiated a permit streamlining program that cut review timelines across the board and simplified the approval process for all key permit categories associated with significant economic development opportunities. MassDEP is now issuing 90 percent of all its permits within three months. MassDEP has dramatically shortened the time it takes for permit appeals as well.

This spring, Governor Patrick announced that initiatives to streamline permitting at MassDEP have dramatically shortened the time to permit projects, removed unnecessary barriers to jobs and economic growth, and made MassDEP a national leader in protecting the environment through smarter and better methods. The Governor made the announcement at Lovejoy Wharf, a site that, because of these permit-streamlining efforts, will soon be the corporate headquarters of Converse.

"Thanks to the efforts at MassDEP to remove barriers and create efficiencies in the permitting process, more businesses are making Massachusetts their home and creating jobs and opportunity in our neighborhoods," Governor Patrick said.

MassDEP eNewsletter • Summer 2013









The Governor also touted a package of additional regulatory reforms proposed by MassDEP, in coordination with business, municipal and environmental stakeholders, to weed out unnecessary or obsolete regulations, further lightening the regulatory burden on businesses and helping to promote job growth.

The main goal of these reforms was to boost efficiency so that MassDEP could maintain high standards of environmental protection despite resource constraints, and ready the agency for an increase in permitting activity as the state's economy rebounded from the recession. Another important goal was to lighten the regulatory burden on business without lowering environmental protection standards.

MassDEP's Regulatory Reform Initiative also fulfills the requirement in the 2010 Act Relative to Economic Development Reorganization for all Massachusetts state agencies to review existing regulations for efficiency improvements. With help from both business and environmental stakeholders, MassDEP implemented numerous changes to its regulations and policies that cut across the agency. MassDEP then worked closely with external stakeholders to flesh out the regulatory and policy details and develop regulatory proposals necessary to implement these reforms – a total of 16 regulation packages.

"These reforms will lighten the regulatory burden on industry and promote jobs and economic development without compromising the Commonwealth's strict environmental and public-health protection standards," said Energy and Environmental Affairs Secretary Rick Sullivan.

MassDEP Commissioner Kenneth Kimmell added that "the private sector will also see significant savings. We estimate that the

changes in our hazardous waste site cleanup program alone will save businesses and municipalities approximately \$1.4 million a year."

Those regulations have been published for public comment and MassDEP will be proposing final revised regulations sometime in the fall of 2013. Once implemented, these reforms will save hundreds of hours of administrative time per year for MassDEP and allow the agency to focus on the most pressing environmental challenges, such as identifying and remedying the sources of pollution of urban waterways, tapping into the hidden energy value of food waste through the process of anaerobic digestion, and implementing the Governor's goal of reducing greenhouse gas emissions by 25 percent by 2020. These reforms will create economic growth; lighten the regulatory burden for businesses; and save significant time and expense for the private sector without compromising the Commonwealth's strict environmental protection standards.

For more information on MassDEP's regulatory reform initiative and permit streamlining efforts, visit: http://www.mass.gov/eea/docs/dep/about/priorities/massdep-streamlining.pdf

Commonwealth Funds Area-Wide Water Quality Management Plan for Cape Cod

Pollution of Cape Cod's waterways from excessive nutrients is a grave environmental and economic challenge. This spring, the Commonwealth stepped up to the plate and pledged \$3.35 million to help the Cape Cod Commission develop a comprehensive water quality management plan for Cape Cod, demonstrating the need to preserve

MassDEP eNewsletter • Summer 2013









the Cape's water quality and ensure that this vital region has sufficient wastewater management in place.



Enjoying water views along the Nauset Marsh Trail in the Cape Cod National Seashore.

MassDEP Commissioner Kenneth Kimmell, Treasurer Steven Grossman and Cape Cod Commission officials signed the agreement, which provides funding through the Massachusetts Water Pollution Abatement Trust, administered jointly by MassDEP, the Treasurer's Office, and the Office of Administration and Financing. The water quality plan will be drafted and offered for public review within the next 12 months, and a final plan will be certified by Governor Patrick and then submitted to the U.S. Environmental Protection Agency for approval.

The Cape Cod Commission is the regional agency charged with developing the water quality plan which, when implemented, will reduce nutrient pollution impacting Cape waterways in order to meet state and federal water quality standards. Nutrients – such as nitrogen – are discharged from septic systems and other sources, which have contaminated Cape Cod bays, rivers and streams.

Nitrogen overload, for example, causes growth of nuisance plants, weeds and algae, destroying habitat for native finfish, shellfish and plants. Other nutrient pollution also contributes to resource degradation, and declines in fishing, shell-fishing, tourism and property values.

Gov. Patrick marked the agreement, noting, "Addressing the Cape's wastewater crisis is a crucial challenge we must face for the sake of our economy, as well as our environment. The Commonwealth stands ready to be a strong partner in that effort."

The funding, as announced by the Trust, provides the Cape Cod Commission sufficient resources needed to develop the most cost-effective and environmentally-sound approaches to managing water quality across the Cape. While there are varying estimates, ranging from \$3 to \$8 billion, for implementing a solution to the nutrient problem, the MOU underscores that there is clearly agreement among state leaders that allowing a degradation of the region's ecosystem is unacceptable.

One of the key reasons for the lower estimated amount to implement a solution would be if there is a locally-driven regional approach, one that is built upon communities partnering together around their shared watersheds. At this stage, MassDEP will oversee the plan's development, in conjunction with other officers of the Trust.

MassDEP Commissioner Kenneth Kimmell said, "MassDEP will partner with the Commission and local officials to develop and implement a cost-effective solution that addresses the serious nutrient problems that exist in watersheds across the Cape. We will ensure that this process includes significant citizen participation and public input every step of the way."

For its part, the Commission will use the \$3 million to develop a plan that will prioritize water resources, identifying the most impaired or endangered, and the actions needed locally to achieve water quality

MassDEP eNewsletter • Summer 2013









goals as quickly as possible. The plan will also limit the amount of infrastructure needed by prioritizing those areas requiring "shared" systems to restore water quality. It will also provide an opportunity to more fully evaluate decentralized and innovative approaches, and identify preferred solutions for nutrient management in nitrogen-sensitive watersheds. A portion of those funds have now been transferred to the Commission to begin work on the plan.

An additional \$350,000 appropriated by the Trust will be used to build a Cape Cod Wastewater "SmartMap" and cost model. It will link land-use data with newly-developed scientific and financial-planning data to help Cape communities identify environmentally-appropriate and affordable wastewater-infrastructure solutions. It will also support the development of the regional management plan.

The MOU designates the Commission as the area-wide planning agency for Cape Cod and it requires the Commission to draw up the water quality management plan. The agreement also outlines the responsibilities required to be carried out by the Trust, MassDEP and the Commission.

Among the items listed in the MOU Scope of Work are establishment of a regulatory-agency working group to oversee the planning process, and the creation of a robust public participation process that will include advisory committees at the Commission level, watershed level and municipal level.

For more information on the Cape Cod water quality management study, visit: http://www.mass.gov/eea/agencies/massdep/news/releases/pact-on-cape-cod-water-management-study-inked.html

\$512 Million in SRF Loans Awarded to 89 Clean Water and Drinking Water Projects in 2013



The State Revolving Fund provides loans for clean-energy projects such as these solar-voltaic panels installed at the Deer Island Treatment Facility.

Eighty-nine clean water and drinking water projects in 67 communities, regional water supply and wastewater treatment districts have been awarded more than \$512 million in low-interest loans to fund construction and planning projects to improve water quality, upgrade or replace aging sewer infrastructure, and cut treatment facility energy use and costs.

The 2-percent interest loans, through the State Revolving Fund (SRF) administered by the Massachusetts Water Pollution Abatement Trust, will fund 54 clean water projects totaling more than \$391 million and 35 drinking water initiatives totaling nearly \$121 million.

Thirty-two of the 89 projects, or more than \$337 million of the total \$512 million, are for renewable-energy or green-infrastructure projects or green components of projects. Those projects involve energy-efficiency upgrades to treatment plants and the on-site

MassDEP eNewsletter • Summer 2013









installation of renewable-energy technologies such as solar cells and hydro-electric power.

Energy use at wastewater and drinking water treatment facilities is a major contributor to overall energy consumption for many municipalities, with communities statewide spending approximately \$150 million per year on electricity to treat 662 billion gallons of wastewater and drinking water. Approximately 30 percent of municipal energy use derives from water treatment.

"The projects supported by SRF funding help communities across the state improve water quality in our rivers, lakes and estuaries, and also protect the public health," said Energy and Environmental Affairs Secretary Rick Sullivan. "The renewable and energy efficiency measures included in the projects will also help to cut air emissions from treatment plants and stabilize municipal energy costs."

MassDEP Commissioner Kenneth Kimmell added that the treatment facilities "combine energy efficiency savings and renewable energy production from solar and hydro to upgrade their operations, leading to significant budget savings that are good for communities and the environment."

Using U.S. Environmental Protection Agency data, 39 of the projects that are in Environmental Justice (EJ) communities are expected to receive some loan principal forgiveness. EJ communities are areas with below-average Median Household Income levels, and communities of color that may experience a disproportionate share of environmental burdens and often lack environmental assets in their neighborhood.

The SRF comprises two programs: the Clean Water Fund, which has awarded approximately \$5.3 billion in loans since

the program's inception in 1991; and the Drinking Water Fund, which has awarded approximately \$1.3 billion in projects since it began in 1999.

This year, the Clean Water SRF funds 15 planning, four carry-over and 35 construction projects, such as wastewater treatment facilities and upgrades to existing sewer systems. The Drinking Water SRF funds two planning, nine carry-over and 24 construction projects; these funds support the engineering, design and construction of drinking water facilities and systems that protect public health and strengthen compliance with state and federal drinking water requirements.

For a full listing of the Clean Water SRF projects for 2013, see Table No. 1 at: http://www.mass.gov/eea/docs/dep/water/wastewater/a-thru-n/13-cwiup.pdf

For a full listing of the Drinking Water SRF projects for 2013, see Table No. 1 at: http://www.mass.gov/eea/docs/dep/water/wastewater/a-thru-n/13-dwiup.pdf

EIPAS Return on Investment Study is Good News for MassDEP and the EEA Secretariat

For the last year, EEA and MassDEP have been working to upgrade their aging information technology (IT) system to become more efficient, transparent and reliable. As part of the funding request, the agencies were asked to quantify the "return-on-investment" (ROI) that the Commonwealth would receive if it made this investment in the Energy and Environmental Information and Public Access (EIPAS) Project. The initial review of the numbers is very encouraging for the EEA Secretariat, MassDEP and EIPAS.

MassDEP eNewsletter • Summer 2013

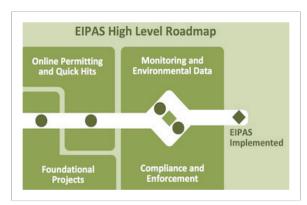








The Commonwealth engaged an internationally-recognized consulting firm to develop the Return on Investment methodology for IT capital-funded projects. The consultant has now applied that methodology to five projects, including EIPAS. The EIPAS project team, in a five-week timeframe, worked with the consultant to apply and refine the ROI methodology against the EIPAS project. During this period, MassDEP staff provided analysis of efficiencies gained by previous IT application systems, and provided copies of studies performed by other states and U.S. EPA. The consultant also worked with each EEA agency to ensure that the EIPAS ROI analysis reflected the benefits to the Secretariat.



The Environmental Information and Public Access System (EIPAS) project will bring dramatic and continuous improvement, as existing legacy systems are replaced by a tightly integrated online system. The system will include new integrated features and functions for the public, regulated entities, environmental professionals, Commonwealth partners, Federal oversight agencies, Department staff, and other stakeholders.

The analysis identified 22 key benefit categories from the EIPAS Project that included such items as:

 Better protection of the environment by using modern technologies, such as remote-sensing, GPS coordination, GIS mapping, and mobile tools;

- Quicker speed to market for businessdevelopment constituents given the streamlined application process;
- Streamlined compliance efforts for regulated entities (such as online data submission, and transparent communication of policy updates); and
- Reduced constituent costs for administrative visits and file reviews.

The analysis focused the ROI on two key corebenefit drivers: Improved Monitoring and Compliance, and Improved Permit Processing.

Improved Monitoring and Compliance benefits are derived from: enabling the use of mobile tools and remote monitoring tools; collecting and analyzing electronic data; and the online portal.

Improved Permit Processing benefits are derived from: online permit application submittal and review; streamlined permit approval logic and processing; online permit-status tracking; and the online portal.

The consultant predicts that EIPAS will yield \$16-24 million in benefits per year. The projected five-year EIPAS project achieves a positive Return on Investment between years five and six of the project.

The strong ROI, along with the strategic plan and roadmap, provides a compelling story for the value of the EIPAS project, which is being reviewed for IT capital funding in fiscal year 2014.









EnviroMatters eNews Briefs

Electric Vehicle Incentive Program Makes \$2.5 Million in Grants Available to Communities



The MassDEP Electric Vehicle Incentive Program will offer eligible municipalities grants up to \$7,500 per electric vehicle and up to \$15,000 per publicly-accessible electric charging station.

The Clean Energy and Climate Plan Goal under the Global Warming Solutions Act (GWSA) calls for Massachusetts to reduce greenhouse gas (GHS) emissions 25 percent below 1990 levels by 2020 and 80 percent by 2050. With the transportation sector accounting for a third of the GHG emissions, the Commonwealth has targeted the deployment of more electric and plug-in hybrid vehicles as one important step toward reaching that ambitious goal.

To get more electric vehicles (or EVs) on the road, on Earth Day 2013 EEA, MassDEP and the Department of Energy Resources (DOER) launched the Massachusetts Electric Vehicle Incentive Program (MassEVIP), which will provide funding to municipalities to help purchase all-electric or plug-in hybrids. The program will also provide funding to communities for the installation of dual

electric charging stations. The \$2.5 million incentive program will encourage increased deployment of advanced-technology vehicles, improve air quality, reduce reliance on foreign oil, and help Massachusetts attain the aggressive emission-reduction goals set under the GWSA.

"This incentive program is intended to encourage and increase the deployment of zero-emission and plug-in hybrid vehicles that will provide significant air pollution emission reductions," said MassDEP Commissioner Kenneth Kimmell. "Over the lifetime of an electric vehicle, the owner can reduce fuel consumption by more than 6,000 gallons of gasoline, reduce fuel costs by thousands of dollars, and cut our reliance on foreign oil."

This program will be operated by MassDEP, and will offer eligible municipalities grants up to \$7,500 per electric vehicle and up to \$15,000 per publicly-accessible electric charging station. It is the first of what the state plans will be other incentive programs to increase electric-vehicle deployment and ease their use

For more information on MassEVIP and how municipalities can apply for EV grant funding, visit: http://www.mass.gov/eea/agencies/massdep/news/releases/launch-of-states-electric-vehicle-incentive-program.html

\$929,000 in SWMI Grants Awarded to Assist Communities with Water Conservation, Demand-Management Projects

MassDEP moved the Sustainable Water Management Initiative (SWMI) forward this spring by making nearly \$929,000 in grant funding available to assist 11 communities

MassDEP eNewsletter • Summer 2013









with water conservation, demandmanagement and other projects that will help to mitigate the ecological impacts of water withdrawals.



Dam removal projects can contribute to the restoration of aquatic habitats upstream and downstream by restoring the natural movement of water and sediment, and by reestablishing more natural temperatures and oxygen levels.

The SWMI Grant Program will help water suppliers by providing grants for planning projects for specific watersheds, developing implementation projects to improve ecological conditions, and managing projects aimed at reducing the demand for water within a municipality or watershed. The grants also support mitigation projects that will increase in-stream flow, improve the handling of wastewater and stormwater, upgrade ecosystem habitat, manage water demand and improve the water supply. SWMI is an effort by MassDEP, the Executive Office of Energy and Environmental Affairs and its agencies to maintain healthy rivers and streams and improve degraded water resources over time.

The grant funding was awarded to: Amherst, Brockton, Dedham-Westwood Water District, Franklin, Halifax, Hopkinton, Kingston, Medway, Pembroke, Scituate, and Worcester.

"A number of communities in the Commonwealth have implemented water conservation measures, but we need to do more to protect our water supplies and the ecosystems they support," said MassDEP Commissioner Kenneth Kimmell. "These projects will help to remove dams, increase waterway flow, recharge aquifers by keeping local water within its own watershed, and reduce the daily demand for water."

For more information on SWMI and the grant program, visit: http://www.mass.gov/eea/pr-2013/swmi-grants.html

MassDEP Protecting the Public from Drinking Water Fraud in Milford

Back in 2009, the Town of Milford was suffering through more than a week of a boilwater order that was required by MassDEP, when the operator of the privately owned Milford Water Company decided to take matters into his own hands. The company official, Henry Papuga, decided to douse that day's water samples with bleach in order see the boil order finally lifted. Instead, his ruse was uncovered by MassDEP, he was eventually charged with a crime, and recently he was found guilty in court and sentenced for his transgressions.

Papuga was found guilty of six counts of Tampering with an Environmental Monitoring Device or Method and two counts of Making False Statements. The judge sentenced Papuga to one year in the House of Correction, suspended for a five-year probationary period, during which Papuga is prohibited from having any involvement in the drinking water industry, and he must complete 250 hours of community service.

"We depend on the integrity of water system operators to ensure that water quality sampling results are accurate and timely to protect the public health," said MassDEP









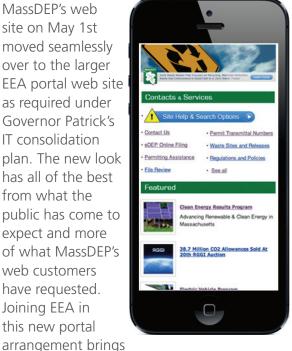
Commissioner Kenneth Kimmell. "We take with utmost seriousness our obligation and mandate to ensure that drinking water delivered to the public is safe."

You can see more details about this case here: http://www.mass.gov/ago/news-and-updates/ press-releases/2013/2013-05-17-papugasentence.html

An editorial about this case published in the Worcester Telegram & Gazette is here: http://www.telegram.com/article/20130521/ NEWS/105219928/1020

MassDEP Web Site Pulls Into 'New Portal'

MassDEP's web site on May 1st moved seamlessly over to the larger EEA portal web site as required under Governor Patrick's IT consolidation plan. The new look has all of the best from what the public has come to expect and more of what MassDEP's web customers have requested. Joining EEA in this new portal



many positives, like a more modern toolset, Google analytics and better integration with other EEA agency sites. Also, by moving to the portal, MassDEP's web pages gained more room for agency content and are now "mobile-ready" or easier to view on smart phones and tablets.

At the same time, change is rarely easy and MassDEP expects this change to be no exception. MassDEP is working to try to make the transition to the EEA portal as painless as possible, but please be aware of the following impacts:

- Although the MassDEP homepage is still be reachable at http://mass.gov/dep/, most old links to MassDEP web pages no longer work;
- The current layout and design of MassDEP's web site has now changed to look more like EEA's: however, the agency's information has remained structured in largely the same way that it was previously;
- Not all of MassDEP's 20,000 content items were moved initially, so more content will be coming online over the next several months. MassDEP focused on making information that people need to do business with us (e.g., regulations and permit applications) available first; and
- Users may be confused when their bookmarks no longer work and/or the site looks different from what they are used to.

It is important to understand that for the next several months, the MassDEP web site will be very much a "work in progress," so the agency appreciates your continued patience.

MassDEP Recognizes 81 Providers with 2013 **Public Water System Awards**

During National Drinking Water Week in May, MassDEP Commissioner Kenneth Kimmell presented the annual Public Water Systems Awards at the Springfield Technical Community College. This year, a total of

MassDEP eNewsletter • Summer 2013









81 large and small drinking water systems throughout the state were given awards for having posted a consistent year of clean and reliable service.



Commissioner Ken Kimmell (2nd from the left) gives an award to the Pepperell DPW, Water Division - one of 81 awarded public water suppliers - for dedicated service in providing clean and safe drinking water.

Since 1991, MassDEP has given these awards to acknowledge outstanding service. While clean and safe water will always be the one and only acceptable baseline, these awards provide a chance for MassDEP to acknowledge the accomplishments over the past calendar year of the very best, the most reliable, the most consistent of Massachusetts public water systems, and those whose future planning and maintenance programs demonstrate a commitment to continuing that excellence.

"In 2012, the Commonwealth was fortunate to have 1,752 public water systems that consistently demonstrated outstanding performance that remains essential to public health and preservation of our natural resources," said Commissioner Kimmell. "It is with pleasure that each year, from among the state's many worthy public water systems, we note those whose effort we feel over the past year deserve special recognition."

For more information on the Public Water System Awards and this year's winners, visit: http://www.mass.gov/eea/agencies/massdep/news/releases/loans-of-512-m-to-fund-state-projects.html

Natural Resource Damages Cases Will Repair Environmental Injuries at Woburn Site and in Buzzard's Bay

Natural Resource Damages (NRD) cases have resulted in millions of dollars to fund restoration efforts at the Industri-plex Superfund site in Woburn, and the release of a final restoration plan and environmental assessment for a species injured by the Bouchard oil spill into Buzzard's Bay.



Sediments and habitat quality at Mystic Lakes in Woburn, have been injured by hazardous substances released at the Industri-Plex NPL site. Photo credit: EPA.

In Woburn, state and federal officials have received a \$4.25 million settlement from two companies, Pharmacia Corp. and Bayer CropScience Inc., for resource damages to Aberjona River and the surrounding watershed. From the 1850s to the 1960s, companies at the Industri-plex dumped hazardous substances that degraded the Aberjona River, wetlands and the Mystic Lakes downstream. NRD Trustees are developing a plan to use the settlement

MassDEP eNewsletter • Summer 2013





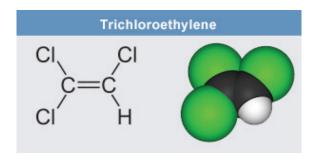




funds to restore the injured resources. For more information on this case, visit: http:// www.mass.gov/eea/agencies/massdep/news/ releases/settlement-for-restoring-resources-inindustriplex-site.html

In Buzzard's Bay, the NRD Trustees released the final restoration plan for the threatened piping plover population impacted by the 2003 Bouchard spill. To help restore the plovers, the plan will use \$715,000 from the settlement to implement an enhanced management program at selected breeding sites. The program will target predator management, increase enforcement of the local beach ordinances on plover-nesting beaches, and public outreach and education. The piping plover restoration plan is the first of three plans utilizing \$6.5 million to restore Buzzard's Bay and nearby sites in order to compensate for natural resource injuries and lost use of areas affected by the Bouchard oil spill. For more information about this case. visit: http://www.doi.gov/restoration/news/ bouchard-barge-120-oil-spill-final-restorationplan-for-piping-plover-released.cfm

With Lower TCE Values, LSPs Must Continually Monitor Contaminated-Site Conditions



Since January, Trichloroethylene (TCE) Status Updates were posted on the MassDEP web page to provide guidance to Licensed Site Professionals (LSPs) and other parties involved with sites that are contaminated with TCE (see "New EPA TCE Toxicity Information: Implications for Chronic and Shorter-Term Exposure and Status of MassDEP Review" that is posted at: http://www.mass.gov/eea/docs/dep/cleanup/laws/tcestat.doc).

As the TCE Status Updates explain, the 2011 changes to the U.S. Environmental Protection Agency toxicity values for trichloroethylene mean that TCE exposures can pose a human health risk, including an Imminent Hazard, at concentrations that are significantly lower than previous toxicity values would indicate. The most sensitive populations are pregnant women and women of child-bearing age (15 to 49 years old) due to the risk of fetal heart malformations from TCE exposure. Indoor air concentrations as low as 2 µg/ m3 at residential settings, and 8 µg/m3 at commercial settings (assuming 40 hours a week exposure) could result in an Imminent Hazard. Moreover, the exposure duration of concern could be as little as a few weeks for pregnant women due to the sensitive developmental stage of a fetus.

MassDEP is working with its advisory committee of risk assessment and toxicology experts to better understand the basis and implications of the new toxicity values so that MassDEP can appropriately address TCE exposures at sites in a timely manner.

In light of this information, MassDEP has begun outreach to remind LSPs and responsible parties that, under these provisions, they must continually assess and evaluate release and site conditions in order to determine if an Immediate Response Action is required. This requirement represents an ongoing obligation to look for conditions that could pose an Imminent Hazard or Condition of Substantial Release Migration (triggering a two-hour or 72-



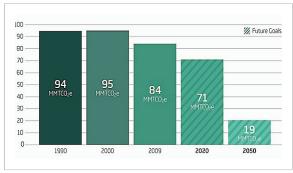






hour notification, respectively). MassDEP is working with parties who notify of TCE exposures of concern to identify and implement appropriate mitigation options based on case-specific exposure considerations, with the goal of quickly reducing TCE levels and ongoing exposures. MassDEP will monitor TCE cases to ensure that Imminent Hazards are abated as quickly and permanently as feasible.

New "Dashboard" Showing Progress on the Massachusetts Global Warming Solutions Act



Massachusetts Annual Greenhouse Gas Inventory: 1990 through partial 2010 data (July 2012).

This spring, the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA) launched a new, on-line tool to help citizens, agency personnel, and other interested parties monitor the Commonwealth's success in reducing emissions that contribute to global warming. This new tool was funded by a grant from the Barr Foundation, and was developed in collaboration with the Environmental League of Massachusetts. It will help track successful implementation of the state's plans to achieve greenhouse gas emission reductions of 25 percent from 1990 levels by the year 2020.

In 2008, Governor Patrick signed into law the Global Warming Solutions Act (GWSA). The Act mandates that the state will reduce its greenhouse gas (GHG) emissions to 25 percent below 1990 levels by 2020, and to at least 80 percent below 1990 levels by 2050. The new GWSA dashboard shows progress and trends in GHG emission reductions, as well as providing information on the sources of GHGs and changes in areas like energy efficiency, green buildings, and lower-emitting transportation. The information in the Dashboard will be updated periodically, and MassDEP will be among the Commonwealth's agencies that contribute to the Dashboard content.

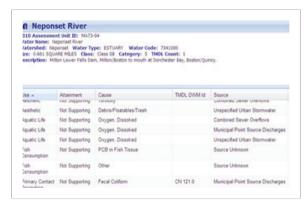
Explore the Commonwealth's Global Warming Solutions Act Dashboard at: http://www.mass.gov/eea/air-water-climate-change/climate-change/massachusetts-global-warming-solutions-act/global-warming-solutions-act-dashboard.html

Learn more about global climate change, and what the Commonwealth is doing to protect our climate, and how you can get involved, at: http://www.mass.gov/eea/agencies/massdep/air/climate/

MassDEP Launches New On-Line Tool Showing Water Quality in Rivers, Lakes, and Estuaries

MassDEP, with the help of MassGIS, has launched a new on-line interactive mapping tool depicting the water quality status of the rivers, streams, lakes, ponds, and estuaries in Massachusetts: http://www.mass.gov/eea/agencies/massdep/water/watersheds/2010-integrated-list-of-waters.html. The information in this on-line mapping tool is

based on the most recent MassDEP report on surface water quality (the 2010 "Integrated List of Waters") that was submitted to, and approved by, the U.S. Environmental Protection Agency.



Look up the water quality status of the rivers, streams, lakes, ponds, and estuaries in Massachusetts with the new online interactive mapping tool.

The two reporting elements included in that report are the 305(b) and 303(d) sections of the federal Clean Water Act. Section 305(b) reports on the water's capacity to support the "designated uses" listed in the surface water quality standards. These uses include: Aquatic Life; Fish Consumption; Public Water

Supply; Shellfish Harvesting; Primary Contact-Recreation (such as swimming); Secondary Contact-Recreation (boating), and Aesthetics. Section 303(d) identifies those waters that are found to be "impaired" (and not supporting the designated uses) and the reason for the impairment. These 303(d) listed waters are prioritized by the state for the development of pollution control plans called Total Maximum Daily Loads (TMDLs).

The new mapping tool allows users to view assessed waters throughout the state as of 2010, and whether they are meeting the water quality standards. Users can click on an assessed segment of a water body to view information on description, category, watershed, water type, size, class and number of finalized TMDLs. A sample screen shot from this online tool is above.

For more information on how the data was gathered or regarding completed TMDLs, contact Arthur Johnson (508-767-2873) or Richard McVoy (508-767-2877) in MassDEP's Division of Watershed Management in Worcester.



Printed June 2013

Kenneth Kimmell, Commissioner Massachusetts Department of Environmental Protection One Winter Street, Boston, MA 02108 On the Web: www.mass.gov/dep/ On Twitter: www.twitter.com/massdep

Free e-Newsletter: www.mass.gov/eea/agencies/massdep/news/enews/